

In re Appln. of OHMURA et al.
Application No. Unassigned

ABSTRACT AMENDMENTS

Replace the Abstract with:

A scale (~~104~~) generates a ~~periodical~~ periodic light-intensity distribution pattern having a ~~predetermined~~ pitch (~~P~~) ~~with upon~~ irradiation ~~of by~~ emission light from a light source (~~102~~). ~~A plurality of light-receiving~~ Light-detecting element groups are shifted relative to the scale to generate phase signals having ~~predetermined~~ fixed phase differences. ~~A plurality of light-receiving~~ Light-detecting elements are adjacently positioned to have the same phase to form each ~~light-receiving~~ light-detecting element group. Area centers of gravity (~~28,29,38,39~~) on a phase axis (~~109~~) of a plurality of the ~~light-receiving~~ light-detecting element groups having a ~~predetermined relationship in~~ fixed phase difference are made coincident with each other.